

Appendix 2.

Ecological Reference Worksheet

Author(s) / participant(s): Brenda Simpson, Dan Thomas

Contact for lead author : Brenda Simpson

Reference site used? Yes/No

No

Date: 10/21/2005 MLRA: WP-2 Ecological Site: Sandy Slopes WP-2 This must be verified based on soils and climate (see Ecological Site Description). Current plant community cannot be used to identify the ecological site.

Indicators: For each indicator, describe the potential for the site. Where possible, (1) use numbers, (2) include expected range of values for above and below average years for <u>each</u> community within the reference state, when appropriate & (3) site data. Continue description on separate sheet.	Indicator Weight
1. Number and extent of rills : No rills or past evidence.	1
2. Presence of water flow patterns: Minimal water flow patterns less than two feet in length.	1
3. Number and height of erosional pedestals or terracettes: Terracettes are few and limited to areas immediately downslope from trees. Minor pedestals less than 1/2 inch.	1
4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground) : Bare ground is 55%. Bare areas are less than 3 feet and connected.	1
5. Number of gullies and erosion associated with gullies: Gullies characterize this site. Scattered ephemeral gullies (< 1 foot) are present with 50% vegetative cover. Some gullies will exist (1-4 feet deep) where runoff from adjacent foot hills and mesas occur. A few major gullies will cross the site (up to 10 feet deep). These deeper gullies	1
6. Extent of wind scoured, blowouts and/or depositional areas: No blowouts. Some surface scouring and minor deposition but not to the extent of vegetative damage.	1
7. Amount of litter movement (describe size and distance expected to travel) : Litter will vary from fine (grasses) to coarse (trees). Litter will travel < 2 feet.	1
8. Soil surface (top few mm) resistance to erosion (stability) values are averages - most sites will show a range of values for both plant canopy and interspaces, if different): Soil surface stability averages to a value of 3.	1
9. Soil surface structures and SOM content (include type and strength of structure, and A-horizon color and thickness for both plant canopy and interspaces, if different) : Soil surface structure is moderate medium platy; A-Horizon is 0-2 inches thick with light brown color (7.5 YR 6/4); SOM is 1.5%.	1
10. Effect of plant community composition (relative proportion of different functional groups) & spatial distribution on infiltration & runoff: Dominant plant composition of cool season grasses are evenly distributed across the site providing adequate protection in normal climatic years and without significant disturbances. Soil infiltration is rated at moderate permeability.	1
11. Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site): Compaction layer is not present.	1
12. Functional/Structural Groups (list in order of descending dominance by above-ground weight using symbols: indicate much greater than (>>), greater than (>), and equal to (=) : Cool Season Grasses > Warm Season Grasses > Half Shrubs and Shrubs >> Trees = Forbs. Refer to Appendix 4 for list of species.	1
13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence) : New plants, mature plants, and decadence of old plants is proportional to maintaining the dominant species. Cool season grasses will show normal mortality and decadence.	1
14. Average percent litter cover (15 %) and depth (0-Jan inches). Litter depth is 0.75 inches.	1
15. Expected annual production (this is TOTAL above-ground production, not just forage production): Average TOTAL production is 630# annually. Low = 315#. High = 1305#.	1
16. Potential invasive (including noxious) species (native and non-native). List species which characterize degraded states and which, after a threshold is crossed, "can, and often do, continue to increase regardless of the management of the site and may eventually dominate the site": Pinyon, Juniper.	1
17. Perennial plant reproductive capability : All plants are capable of reproduction. The only limitations are weather related or a natural disease affecting reproduction.	1

Photograph (s)

MLRA :

Date :

Ecological Site :

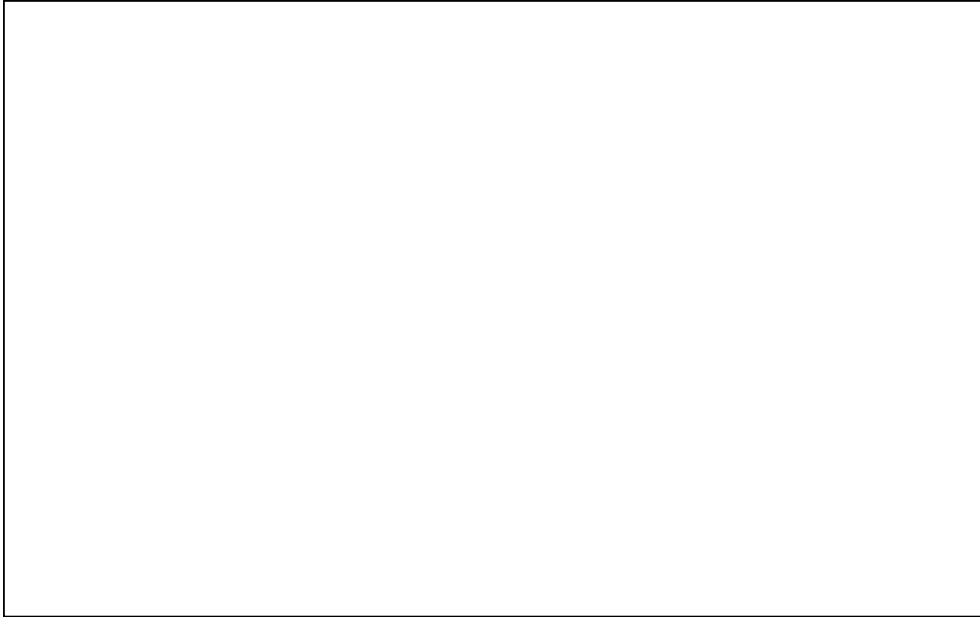


Photo # 1

Comments :

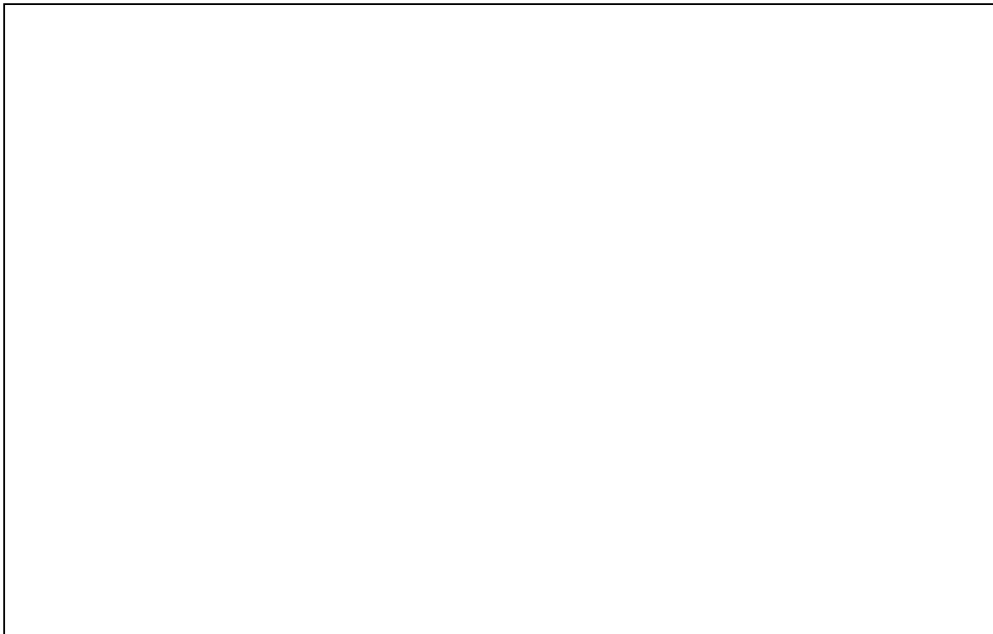


Photo # 2

Comments :

Appendix 4.

Functional / Structural Groups Worksheet

State	<u>New Mexico</u>	Office	<u>Grants FO</u>	Ecological Site	<u>Sandy Slopes WP-2</u>
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Observers	Brenda Simpson, Dan Thomas	Date	10/21/05
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Indicate whether each "structural/functional group" is a Dominant (D)(roughly 40-100% composition), a**Sub-dominant (S)** (roughly 10-40%) composition) a**Minor Component (M)** (roughly 205% composition), or a**Trace Component (T)** (<2% composition) based on weight or cover composition in the area of interest (e.g., "Actual ² column) relative to the "Potential ² column derived from information found in the ecological site/description and/or at the ecological reference area.

Biological Crust 3 dominance is evaluated solely on cover not composition by weight